UNIVERSITY OF ALBERTA

Killam Annual Professor

ALES researcher rewrites model for predicting extinction

Page 3

The Open Door Rural tour well received Page 5

Physiology turns 100

War hero gives Department of Physiology its start

Volume 51 Issue 5 | November 8, 2013 | www.folio.ualberta.ca

# Provincial government boosts funding for current year

Folio Staff

The University of Alberta will receive \$14.4 million from the provincial government to boost its base budget grants for the current 2013-2014 fiscal year.

The announcement made Nov. 6 by Thomas Lukaszuk, deputy premier and minister of enterprise and advanced education, was part of an immediate \$50-million reinvestment in the Campus Alberta grant.

"This is excellent newsonly for our university and the post-secondary education sector, but for the province as a whole," wrote President Indira Samarasekera. "Alberta needs a highly educated workforce, and Alberta's universities have a critical role to play in fulfilling this provincial need.

Samarasekera said she will be working closely with senior leaders in the coming weeks to develop a plan for allocating this reinvestment to address enrolment pressures and enhance the U of A's capacity to provide a high-quality educational experience.

She said the direction the plan takes will be based on the four-point action plan, initially unveiled at the State of the University address Sept. 19, designed to provide stability amid the university's current fiscal challenges. The plan consists of four main strategic objectives-academic transformation, sustainable financial models, efficient administration and culture change—guided by an overall commitment to the institution's core mission and excellence.

"It's important that we take time to make decisions that will serve the long-term best interests of the U of A and our students," she said. "I look forward to working with the senior leadership team as we move ahead with this important reinvestment."

# Unstoppable

Fourth-year education student Sabrina Kelly powers on during the tries to shake a would-be tackler during the Pandas' 29-10 win over the University of Guelph Gryphons Nov. 3 in Quebec City, to claim their sixth national title, and first since 2003. Story page 3.

# U of A science and tech leaders win ASTech Awards

Folio Staff

handful of talented University of Alberta researchers were honoured for their vision and leadership by the Alberta Science and Technology Leadership (ASTech) Foundation.

The annual ASTech Awards were handed out Oct. 25 to cutting-edge scientists in 13 categories from all across the province, including three from the University of Alberta.

The ASTech Foundation, created in 1989, honours outstanding achievements in science and technology in Alberta. This is the 24th year that ASTech awards have been given.

The 2013 roster of winners from the U of A recognizes a leading former U of A dean, a stargazing network that can predict the Northern Lights, and a U of A Rhodes Scholar.

This year's winners include Gregory Taylor, for the ASTech 2013 Outstanding Contribution to the Alberta Science and Technology Community. As dean of science at the U of A from 2002 to 2012, and a current professor in the Department of Biological Sciences, Taylor was recognized for his dedication to strengthening the vibrant, interdisciplinary teaching and research that makes the U of A Faculty of Science a leader today. His vision also helped drive the creation of the Centennial Centre for Interdisciplinary Science, which is home to innovative crossdisciplinary research and discovery.

"I am really receiving this award on behalf of so many people who work tirelessly to promote interdisciplinary teaching and research in the







(From left) 2013 ASTech Award winners Megan Engel, Ian Mann and Gregory Taylor

Faculty of Science," said Taylor. "I have had the pleasure of working with an extraordinary group of faculty and staff. This award is a reflection of their creativity and commitment.'

The ASTech 2013 Public Awareness Award went to the U of A's Aurora Watch, led by principal researcher Ian Mann of the Department of Physics and put together with the help of a team of researchers and graduate students. The user-friendly project brings to the public the beauty of viewing the Northern Lights, through an email alert service that lets people know when the glowing light shows are most likely to happen. Aurora Watch has had 1.2 million individual visitors, and has 26,000 email subscribers and 2,000 followers on Twitter (@aurorawatch).

We are delighted and honoured that the impact of Aurora Watch. ca in promoting space science and technology was recognized with this ASTech Award to the Aurora Watch team," said Mann, noting that space weather can also have more damaging Continued on page 2



a conversation with

# **ALANIS MORISSETTE**

# MARGARET ATWOOD

FRIDAY, NOVEMBER 22 | 8:00 PM | WINSPEAR CENTRE

Call 780-428-1414 or visit

festivalofideas.ca

# Volume 51 Issue 5

(University Relations) Marketing and Communications 6th Floor, General Services Building University of Alberta Edmonton, Alberta T6G 2H1

#### Editor

michael.brown@ualberta.ca

#### Contributors

Bryan Alary, Bev Betkowski, Michael Brown, Lisa Collins, Emily Court, Yan Doublet, Matt Gutsch, Jamie Hanlon, Amy Hewko, Michael Holly, Laura Ly, Raquel Maurier, Geoff McMaster, Debra Pozega Osburn, Esmond Sanders, Richard Siemens, James Young

# **Graphic Design**

folio's mandate is to serve as a credible news source for the university community by communicating accurate and timely information about issues, programs, people and events. folio is published 23 times per year.

select, edit and position submitted copy and advertisements. Views expressed in folio do not necessarily reflect university policy. folio contents may be printed with acknowledgement.

#### Inquiries

nents and letters should be directed to Michael Brown, editor, 780-492-9407

### **Corporate & Display Advertising**

Deadline: Thursday, noon, one week prior to publication Debbie Keehn, 780-492-2325 folioads@ualberta.ca

# Classified Ads

Deadline: Thursday, noon, one week prior to publication Debbie Keehn, 780-492-2325 folioads@ualberta.ca

# **Talks and Events**

Deadline: Thursday, noon, one week prior to publication

Enter events online at www.uofaweb.ualberta.ca/events/ submit.cfm

#### Circulation/Change of Address

Contact Debbie Keehn at 780-492-2325 or via e-mail at

# **Billing Info**

Contact Fatima Jaffer at 780-492-0448 or via e-mail at fatima.jaffer@ualberta.ca ISSN 0015-5764 Copyright 2013



The University of Alberta maintains a database of all alumni. This database is used to send you news about the U of A, including folio and New Trail, invitations to special events and requests for support. On Sept. 1, 1999 post-secondary institutions were required to comply with the Freedom of Information and Protection of Privacy legislation of the province of Alberta. In accordance with this legislation, please respond to one of the following options:

- □ Please keep my name, or □ Remove my name from the folio list.

No response means the University of Alberta assumes an individual wishes to remain on the mailing list.

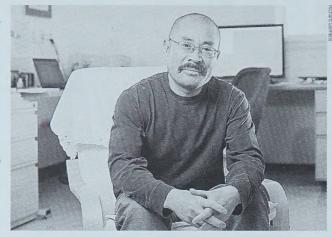
# Killam professor a global leader in biodiversity conservation

The irony is not lost on Fianglang He. As one of the University of Alberta's leading specialists in biodiversity conservation, he is well aware of environmental factors that force species into extinction. But he also believes in accurate science above all. Two years ago he proved that the prevalent model for predicting species extinction following habitat loss was mathematically wrong, overestimating the number of species affected.

The discovery made headlines around the world, picked up by some 1,000 media outlets. It was disarming for some environmental lobby groups, many of whom share He's concerns about declining biodiversity. But the facts are the facts.

There was a huge outcry, says He, a recipient of the 2013 Killam Annual Professorship in the Faculty of Agricultural, Life and Environmental Sciences. "It's a very controversial issue, and a lot of people don't like what we do. But our argument was, let's get the science right first, and in this case the proof was solid. For some, it doesn't matter how much you prove, you will never change their minds."

The Canada Research Chair in Biodiversity and Landscape Modelling will devote part of his Killam funding to working globally



Fianglang He made headlines two years ago when he showed models for predicting species extinction overestimated the number of species affected.

on one of the most pressing issues of our time, largely through a 2011 partnership agreement between the U of A and Sun Yat-sen University in China to establish a joint biodiversity lab.

The lab has attracted considerable attention from researchers in the United States, Australia, Finland, Spain and France. "This joint lab will really help facilitate our efforts to put our research in a more global context," says He, director of the joint lab.

There are few people more qualified to lead such an ambitious project. Not only has He published widely in the best journals in his

field-such as Nature, Nature Communications and American Naturalist—but he has also sat on the editorial boards of nine highlevel journals since 2003, becoming a go-to adjudicator for new research on biodiversity.

"It takes up about a third of my time now," says He. "Every day I have a manuscript to review—it can be a little overwhelming

Much of He's recent research focuses on the link between global warming and the performance of spe cies, but he is also heavily immersed in issues of landscape modelling. One project examines differences

ទ្ធី in pollination patterns between single-crop and multi-crop land, and between old-growth and newgrowth forest. Another looks at how forest carbon sinks are affected when debris is left behind to decompose, producing carbon dioxide, after deforestation.

In addition to all of these research obligations, however, He says some of his biggest highs come from interacting with students in the classroom.

"I love teaching, but it's a funny business," he says. "Before you enter the classroom, you feel like, 'Oh no, I have to teach again.' But when you're standing there, you really enjoy the interaction with the students and get enthusiastic. I guess a lot of people have the same feeling."

The Killam Annual Professorship, which comes with a cash prize of \$3,500, is based on scholarly activities including teaching, research, publications, creative activities, presented papers, supervision of graduate students, courses taught, and service to the community beyond the university in activities related to university responsibilities.

# ASTech awards

Continued from page 1

consequences on the satellite, GPS and power grid infrastructure we increasingly rely on in the 21st century.

"Current U of A space research is focusing on understanding, forecasting and ultimately mitigating such space weather impacts, as well as contributing to generating future economic benefits from space research," he said.

Rhodes Scholar Megan Engel, who studied physics at the U of A and has begun her PhD studies at Oxford University, is the recipient of the 2013 ASTech Leaders of Tomorrow Award. The award recognizes Engel's ambitious research conducted at the U of A's National Institute for Nanotechnology, where she studied the mysteries of folding proteins and nucleic acids that contribute to devastating brain disorders such as Parkinson's and Alzheimer's diseases. The award also recognizes Engel's commitment to music and the arts in her quest to be a well-rounded academic.

The ASTech Foundation chose this year's winners from a list of 23 nominees in various categories, including two outstanding innovators from the Uof A.

Professor Dean Spaner of the Faculty of Agricultural, Life and Environmental Sciences was nominated for his years of painstaking, patient work in plant breeding, resulting in two new and improved strains of wheat.

Matthew Benesch, who holds a PhD and is studying for a medical degree from the Faculty of Medicine & Dentistry, was nominated for his desire to be a leader in the field of surgical oncology, and for his dedication as a campus volunteer.

# Canadian soldiers well prepared for mission: study

s the Canadian Military and Veterans' Chair in Clinical Rehabilitation at the University of Alberta, Ibolja Cernak undertakes every research project with one goal in mind: to help our soldiers and veterans lead healthier, productive lives.

That's why Cernak has conducted clinical studies on Canadian Armed Forces bases, and why she just spent the entire month of October working shoulderto-shoulder with the troops, studying their resilience, stress and coping.

The work is part of a study of resilience in troops before, during and after deployment-information that can be used to improve their training and support, and ultimately improve their quality of life After completing baseline testing with 120 Canadian troops prior to deployment, measuring responses to visual stimuli, memory and impulse control in addition to biological data, Cernak found that while stationed in Kabul, Afghanistan, in many cases soldiers' responses improved.

# Remembering military sacrifices

Cernak's research is supported in part through funding from the Royal Canadian Legion Alberta-NWT Command, True Patriot Love, and the late Harry Hole. Wayne Donner, Alberta-NWT Command president, lauded Cernak's efforts to help improve the quality of life for veterans, whose sacrifices are always apparent and particularly meaningful at this time of year.

"It is through her research and that of the University of Alberta's Military and Veterans' Rehabilitation Program that we hope to improve the quality of life of our veterans," Donner said.

The next stage in Cernak's study involves testing soldiers after they return from Afghanistan and measuring how they're affected by their experiences and readjustment to life at home. Every participant to date has agreed to continue with the study, citing the overall importance the research has to their quality of life. The study is also open to more volunteers, including veterans, first responders and those who work in high-stress occupations such as mining and oil and gas, among others.

Cernak will speak about her research at the Canadian

Institute for Military and Veteran Health Research's 2013 forum, which this year is co-hosted by the U of A.



Ibolja Cernak (second left) spent the entire month of October working with Canadian troops, studying their resilience

"If you look at the performance as a whole, the predeployment training did a good job preparing soldiers. Canadian soldiers are extremely well trained." Cernak said, citing strong motor skill response to signals and a keen ability to multi-task as some of the more notable improvements. "Very often soldiers are switching back and forth on several tasks. It is quite impressive.

Testing also identified categories where performance was not as strong, including impulse control and spatial memory—areas that could be improved through modified training, she said. The research also identified more than two dozen soldiers identified as being in need of followup care for physical ailments that make them more susceptible to injury or chronic illness, or in need of mental health support.

Canada's role in Afghanistan is to support the transition of security to Afghanistan forces. Despite the non-combat role, working from a military base presented logistical challenges and unparalleled experiences Cernak could not have gained from being in a lab halfway across the globe. Basic lab tasks such as freezing biological samples required hauling a freezer from base to base to base—six in total.

"It becomes quite palpable how the little things, like keeping biological samples frozen, present a challenge in Afghanistan. You don't think about that when you're back home in a research lab where you have everything at your disposal," she said. "All of the logistics was provided by the Canadian task force, which was actually quite complicated. Their help was truly impressive I could not have completed this work without such strong support from the Canadian Armed Forces."

# Pandas rugby rucks and mauls way to first national title since 2003

The University of Alberta Pandas rugby team capped off a perfect season by defeating the University of Guelph Gryphons 29-10 in the Canadian Interuniversity Sport women's rugby championship match Nov. 3 in Quebec City.

It is Alberta's sixth Monilex trophy in program history, a CIS record that puts an exclamation mark on a season that saw the team go 9-0.

The Pandas began the tilt in dominant fashion against the Ontario University Association finalists from Guelph. Following a Rebecca Fairbairn three-point penalty kick, fifth-year player Louise Chavarie, who hails from Gaspe, Quebec, scored back-to-back tries both of which were converted by Fairbairn-to give the Canada West champs an early 17-0 lead.

Fifth-year scrum-half Chelsea Guthrie, who would later be named the national championship MVP, added to the total when she busted a tackle down the right sideline for the try. Another convert by Fairbairn made the score 24-0 at

But there would be no quit in the Gryphons. After being physically owned in the first half, Guelph showed strength and resolve in the second half, and put that to use by scoring a pair of tries, both of which went unconverted, to make the score 24-10.

The Pandas, however, dug in to fend off a furious Gryphons effort, and added another try, this time by Jen Cousineau, who powered through three Gryphons tacklers to push the Pandas' lead to 29-10.

"We knew it was going to be a tough game when you get to the final," said Pandas head coach Matt Parrish. "Our plan was to get ahead with this little bit of wind. Guelph came our really hard in the second half and it took us awhile. I just thought we played a really disciplined game today. I'm very proud of them.

Alberta outscored their opposition 117-32 during their three games at the tournament. Dominant all season long, the Pandas outscored teams by an average of 48-5 in the regular season and 45-8 in the Canada West and CIS championship tournaments combined.

"They are a tough opponent, they retain possession very well, they attack both sides, and so they are pretty unpredictable. They have a balanced attack and a good defence," said Gryphons head coach Colette McAuley.

This is the first championship for the Pandas since their run of five in a row ended in 2003. The program, however, did collect one silver medal (2005) and two bronze medals (2004 and 2012) between 2004 and 2013.

The title also represents the U of A's first fall sport championship win since 2006 (Golden Bears soccer), and the school's first team to have an undefeated and championship season since Golden Bears volleyball nailed down a perfect season in 2008-09. The CIS title also represents the 19th straight year the U of A has won at least one CIS championship. Besides Guthrie's tournament

MVP, which adds to a stellar career that saw her collect the 2012 Canada West MVP award and

University Games in Russia, five of her reammates-Fairbairn, Sabrina Kelly, Amee Svatos, Julia Goss and Alanna Fittes-were named

win bronze at this summer's FISU

championship all-stars, while Fittes, the Canada West leading scorer this season, was named Player of the Game in the championship final.  $\blacksquare$ with files from CIS Nov. 30

# Taking the U of A to the people

Debra Pozega Osburn, Vice-President (University Relations)

inton. Edson. Whitecourt. Wainwright. Killam. Forestburg. Spruce Grove. Parkland County. Stony Plain. Banff. Cochrane. Canmore. So far, we've put 2,000 kilometres and dozens of towns and villages behind us, with more ahead. That's the status today of the University of Alberta's "Advancing Alberta" tour, which takes the university to communities throughout the province.

First, a bit of background. More than a year ago, University Relations revisited an idea that has been integral to the U of A since its founding: that members of

the institution should travel across the province, listening and

the open door

learning, while bringing the U of A story to our stakeholders. We piloted the project with a visit to three communities in the fall of 2012, and since August 2013, we have undertaken three more regional tours.

For me, as the U of A's lead representative on the tour, the experience has been profound. I have heard stories of lively histories and vibrant aspirations. Mayors describe visions of economic growth; educators, of new ways of teaching and learning. From business leaders come stories of innovation and resiliency; from village historians, tales of deep roots and communal dreams. Alberta's communities firmly believe they can define their own success—and intend to do so.

I am a fervent "explorer" of this province and region. A few years ago, my husband and I loaded a rented Ford Edge with the necessary gear and fished our way to Yellowknife, N.W.T., and back, travelling a few hundred

kilometres a day along a meandering path that took us through Grande Cache, Grimshaw, Peace River, High Level and countless other communities. Each year, he and I make a point of taking a road trip or two to another new community. I'm not one to shy from striking up a conversation, so we never fail to find people willing to tell us of their town's history and vision of the future.

A tour on behalf of the U of A, however, is something else entirely.

Each visit is meticulously planned and precisely executed. Alexis Ksiazkiewicz, a senior member of the UR team, joins me, and we typically team up with faculty members, post-docs, alumni and others with ties to the communities we'll be visiting, helping assure that our discussions are relevant and informative. Sometimes we provide public presentations and lead discussions with mayors, reeves, town councillors, school board members, chambers of commerce, MLAs

Debra Pozega Osburn

The conversations are wide-ranging, but with some common ground. I typically start the conversation the same way: The University of Alberta is changing. It's becoming a university that is global in scope and impact, and will be a key factor in this province's future success on the global stage. However, we are determined to stay connected to the communities we have served here in Alberta for the last 105 years. Tell us how your community is changing and your vision for the next generation.

From there, the discussions take many paths. In Hinton, we talked about the possibility of a new mining operation and about the role of online learning in contemporary university settings. In Banff, we talked about the need for skilled workers in the tourism and hospitality industry; in Canmore, about environmental sustainability. Many communities are concerned about the ability of their young people to succeed, whether or not they stay in, or return to, their hometown.

Of course, there are ample opportunities to tell the U of A story, and I do so with predictable enthusiasm. Without exception, these community leaders express great pride and trust in this university. They see us as vital to Alberta's future—as a focal point in Campus Alberta that gives the province an essential edge. They want to partner with us. They too value innovative thinking and believe that knowledge is the foundation of future social and economic well-being. They see our students as tomorrow's leaders, not only in their communities but also throughout the world.

By the end of our discussions, we talk about future connections, through more visits, public lectures or presentations, or joint projects and initiatives. When I return to campus, I speak with various deans and other senior leaders to determine the appropriate followup.

Come spring, we expect the next segment of the Advancing Alberta initiative to take us to the north. I look forward to taking the U of A story there—forging new relationships, renewing others and, above all, enhancing understanding of this university's excellence, relevance and impact.



Amee Svatos and some reinforcements charge up the field Nov. 3. during the Pandas CIS national championship 29-10 win over the Guelph Gryphons

# Gaming guru helps students level up

fter creating a new virtual reality, University of Alberta alumnus Ray Muzyka realized business reality was more than just a game. Now the co-founder of BioWare is lending his experience and wisdom to others as the founding chair of the new Venture Mentoring Service (VMS) at the U of A.

The VMS program will partner student and alumni entrepreneurs with successful alumni mentors who can help them develop their ideas and skills.

Our vision for VMS is to help support and uplift University of Alberta entrepreneurs. When we found-



the new Venture Mentoring Service.

ed BioWare, programs like this readily available for U of A students and alumni," Muzyka noted. "I certainly would have benefited from this kind of mentorship myself, so I'm verv

U of A alumnus and BioWare co-founder Ray Muzyka is the chair of excited about the potential of this new program, and truly honoured to participate as its

Based on the VMS program developed at the Massachusetts Institute of Technology, the VMS program at the U of A will focus on developing business and social entrepreneurs—helping them to use the

challenges of entrepreneurship as learning experiences as their ventures scale and grow. 'We know University of Alberta graduates have

an incredible impact on society," said President

Indira Samarasekera. "This new program is one more way in which the university will support and encourage students and alumni to pursue entrepreneurship and innovation, and to continue to drive our province's economic and social prosperity."

A recent study on the impact of U of A alumni revealed they have collectively founded 70,258 organizations globally, creating more than 1.5 million jobs and generating annual revenues of \$348.5 billion. It also showed that one-third of these organizations are non-profit or have a social, environmental or cultural focus. "Our study shows that while 19.7 per cent of students eventually found new organizations, most do so after they graduate," said study coauthor Tony Briggs. "VMS will further contribute to the education and success of U of A entrepreneurs as they engage with the broader community and develop new organizations."

Incoming VMS entrepreneur Emmet Gibney, U of A alumnus and founder of CareNetwork.com, says that "VMS reaffirms what I'm seeing elsewhere in the community—the culture of entrepreneurship and innovation is becoming a movement. The city is coming into its own, and I'm excited about being part of this exciting time in Edmonton and building my company here, with the help of VMS'

And the mentors will benefit too, says Muzyka. "Participating in the VMS program as a mentor will be incredibly stimulating and rewarding. Mentors will engage and learn from passionate entrepreneurs pursuing a range of diverse, interesting ventures. And, as the recent Alumni Impact Survey illustrated, the impact of U of A graduates is already tremendously positive, and we'll be striving to help these entrepreneurs to be even more successful in the future.

More information on VMS can be found at www.ualberta.ca/vms.

# Medical researchers discover potential new treatment for colitis

Raquel Maurier

drug currently on the market to treat leukemia reversed symptoms of colitis in lab tests, according to recently published findings by medical researchers with the University of Alberta. Shairaz Baksh, a researcher in the Faculty of Medicine & Dentistry, published his team's discovery in the peer-reviewed journal PLOS ONE.

His team discovered that a tumour-suppressor gene can also play an important role in the development of colitis. When this gene quits working or is missing, the inflammation process is triggered and the body loses its ability to repair damaged colon tissue. This leads to severe discomfort and poor recovery following bouts of inflammation. Persistent inflammation is prevalent in inflammatory bowel disease (such as Crohn's disease and ulcerative colitis).

Baksh and his team wondered whether they could interfere with the inflammation process and encourage the body to repair the damaged tissue, so the disease would be less severe and patients could recover more quickly from any flare-ups. The team used a leukemia

drug called im atinib (marketed as Gleevec), which has been on the market for years, to treat lab models with and without the tumoursuppressor gene.

'The treatment reversed the symptoms of colitis," says in the Department of Pediatrics, the Department of Biochemistry and the Division of



Shairaz Baksh shows off his research results

Experimental Oncology. "We are on the cusp of a new treatment for this condition that affects 150,000 Canadians. We are pretty excited about the impact of this finding.

"We are trying to inhibit colitis by preventing the inflammation that is causing the damage. More importantly, by controlling or preventing the inflammation, we can reduce the likelihood that patients with ulcerative colitis develop colorectal cancer later in life. About half of these patients develop this type of cancer due to chronic inflammation.

"Our findings also suggest we may have identified novel biomarkers for the appearance and progression of inflammatory bowel disease

His team is continuing its work in this area and has discovered that other drugs currently on the market have the same effect in reducing the symptoms of colitis in lab tests. He hopes to publish the new drug study results very soon, and suspects a new treatment for colitis could be a combination of two to three drugs already on the market. A combination drug therapy would need to undergo further testing in the lab, but could go to clinical trials in about five years because the

medications are already approved.

About 0.5 per cent of Canadians have colitis. The incidence is higher in Alberta than in other provinces, and studies are now underway to identify the hot spots in the province. Genetics, diet and environment each play an important role in the development of the disease. Symptoms include abdominal pain, rectal bleeding and weight loss. Patients with the condition have ulcerated and inflamed colons, which are shorter than average and cause a great deal of discomfort.

His research was funded by Alberta Innovates - Health Solutions, the Hair Massacure and the Canadian Institutes of Health Research.

# Mandels honoured through endowment

niversity of Alberta students of political science, fine arts and performing arts will soon be supported in their studies through an endowment honouring the public service, community leadership and philanthropy of Stephen and Lynn Mandel over the past 12 years.

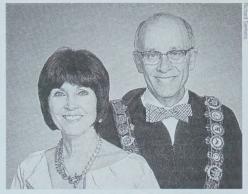
The endowment goal is \$250,000, and once fully funded the endowment will support three students every year. The financial support can be awarded to students as a scholarship based on educational achieve ment or as a bursary based on financial need.

The campaign to create the endowment is spearheaded by U of A alumni Irv Kipnes and Ralph Young. More than 40 friends and colleagues of the Mandels have already donated.

"In my mind, this is the perfect way to honour Stephen and Lynn's contributions to our city," said Young, U of A chancellor and a longtime friend of the Mandels. "They supported the arts, they had a passion for young people, and they always recognized the importance of the University of Alberta to the vibrancy of our city.

They gave so much of themselves over the past nine years, it is fitting that this will live on in perpetuity and help young people realize their potential and give back to our community.'

"We are so honoured by this contribution," said President Indira Samarasekera. "Stephen has shown such leadership and support for young people and for the University of Alberta during his term, he has further deepened our connection with the city and



Stephen and Lynn Mandel's public service, community leadership and philanthropy will be honoured through an endowment at the U of A.

Lesley Cormack, dean of arts at the U of A, said, "Arts graduates make a valuable and profound contribution to public and community life, and the legacy of the Mandels both to inspire and to make a practical difference is so fittingly recognized by establishing an endowment in their name."

Contributions to the endowment can be made at giving.ualberta.ca/mandel.

During his nine years as Edmonton's mayor, Stephen Mandel's passion and support for the arts, public service, post-secondary education and young people manifested through the growth of the Mayor's Evening for the Arts, his support for the Alberta Art Gallery, the creation of the NextGen committee and iHuman, and the move of the provincial museum and arenas downtown, and of the U of A into Enterprise Square.

# Registrar's office to mark new calendar

Lisa Collins, U of A Registrar

This fall, the Office of the Registrar is aspiring to achieve the vision for the University Calendar as outlined in Dare to Deliver 2011-2015, which calls for "the development of an enhanced and interactive University Calendar that will be integrated with other administrative systems.'

We want to meet this challenge by developing an electronic calendar that is reflective of a top five university in Canada. We see this as an opportunity to address long overdue mid- and long-term improvements to the usability and functionality of the electronic version of our calendar.

In evaluation of this project, the Office of the Registrar is discontinuing the print version of the University Calendar. Demand for the print calendars has declined each year. In 2012, the Office of the Registrar stopped mailing print calendars to Alberta high schools. We also have slowly reduced the size of the calendar print run; in 2008, 20,000 copies were printed, compared with 8,500 in 2013. As demand is decreasing for the print calendar, we are focusing our efforts on delivering a new, improved online University Calendar for the future

We need to act quickly and efficiently to meet the Dare to Deliver time frame. We are up to the challenge to deliver on this defined task and have outlined the following steps: terminate the print calendar for 2014-15; initiate consultation with partners and stakeholders to help shape the project plan for the future calendar; start development and execution of the new online University Calendar project; and implement a phased approach

beginning with the 2015-16

University Calendar.
Although we are terminating production of the print calendar for 2014-15, we will continue to provide the electronic version of the University Calendar in HTML format, as well as in various PDF versions. Users will be able to down load individual sections and print them as required. For example, sections available in PDF include the president's message, inquiries, academic schedule, application deadlines, undergraduate admission, regulations and information for students, undergraduate programs by faculty, graduate studies and research, open studies, course listings, glossary, general information and university staff.

We recognize that the current online functionality of the electron ic calendar is not what it could be. Therefore, we will develop guides and tips to help you navigate and use both the HMTL and PDF versions during the interim period.

Should you have feedback about the decision to terminate production of the print version of the calendar, please let us know by Nov. 20. Please send your feedback to calendarfeedback@ualberta.ca or call Carrie Holstead, manager, policy and governance, at 780-248-1142.

We envision the future calendar to be a resource that all stakeholders, including students, faculty and staff, will use and interact with effectively and efficiently. The overall goals will be to improve the functionality of the University Calendar as a key web-based electronic tool and to provide a user experience that is commensurate with expectations of a top Canadian public university. Within the project, we anticipate reviewing items such as presentation to the

user, approval workflow processes and overall content management.
We firmly believe that we can develop a productive and successful product with the help and consultation of our partners and stakeholders on campus.



Lisa Collins

As soon as the final decision on the print calendar passes through the General Faculties Council, the Office of the Registrar will begin consultation with campus stakeholders on the future direction of the University Calendar. These consultations will inform the overall scope of the project to effectively manage single-source calendar content, to respond to campus needs with respect to frequency of University Calendar releases, and to optimize submission, management and presentation of calendar content.

We look forward to hearing from you and are excited to embark on this significant project that will help improve the way we use and interact with our University Calendar. We are committed to keeping you informed about the future of the calendar once final decisions and directions are confirmed.



# Research that Spider-Man would love

Richard Cairney

team of University of Alberta engineering researchers are developing new adhesives inspired by a gecko's foot that have directional stickiness. Think of Spider-Man scaling the side of a building and you've got

Mechanical engineering professor Dan Sameoto and his research team recently published findings from their research in which they turned flaws in previous experiments into a huge advantage. The result is an adhesive strip that sticks more when pulled in one direction than in another. It's effectively tape that sticks strongly to a surface when you push it in one direction and slips off when you push it in the opposite direction.

Sameoto and graduate student Walid Bin Khaled are conducting research in a field of adhesives inspired by the foot of the gecko. The bottoms of the tiny lizard's feet are

covered with millions of tiny hairs with a triangular end, which allow it to climb up walls and across ceilings. Like a gecko's feet, the adhesives Sameoto has been researching for years have tiny stalks, like hairs, that can connect time and again with a variety of surfaces without leaving residue.

In recent years, researchers have discovered that by adjusting the stalks so they have an overhanging cap tip, they can increase the material's adhesive strength. But when there are defects on these caps, the bond is broken more easily.

Sameoto and Khaled cleverly realized that if they intentionally introduced defects in the same place on each of the caps of all the stalks, they could turn the "defect" into an advantage and create a directional adhesion.

'We noticed that every time there was a defect in a cap, or a tiny speck of dust or anything on it, that was the site at which the adhesion would fail," said Sameoto. "Then we thought, 'Maybe we can control this."

Peeling a strip of the adhesive off of a glass surface in one direction, then another, Sameoto observes that "you can even hear the difference," as the strip releases differently in opposite directions.

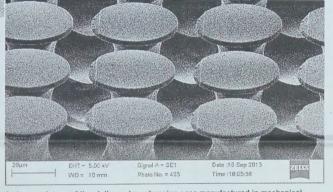
Applications for dry adhesives are far-reaching. For example, in the production of microelectronics, tiny chips are handled in high-tech clean rooms by workers who wear "bunny suits" and use tweezers to handle the chips. But robotics could get the same job done in a vacuumed environment instead of a clean room, using the dry adhesive instead of tweezers. The adhesive could also replace suction cups used in other applications—including work in outer space.

"Our adhesives can potentially be used in all these applications because they demonstrate reasonably strong normal adhesion strength with respect to the adhesives which were used for these systems," said Khaled.

The team is also looking for ways to eliminate the build-up of static charge in the strips that occurs with some materials.

"It is less severe with the thermoplastic adhesives as compared with the pure polyurethane ones," said Khaled. "We actually made a version of these adhesives using a polyurethane-carbon black nanocomposite which is conductive and does not allow static build-up, and we are currently exploring some new thermoplastic materials which would be conductive or at

The team's research findings were most recently published in the journal Bioinspiration and Biometrics.



A close-up image of the stalks and overhanging caps manufactured in mechanical engineering researcher Dan Sameoto's lab. The scored lines on the left side of each cap are an intentional defect, enabling the tips to stick to a surface strongly in one direction

#### In honour of its centennial year, the Department of Physiology (the Faculty of Medicine & Dentistry's oldest department) has released a history book written by former department chair Esmond Sanders (1994-2004) and current chair James Young (2012-present). The chronicle explores a century of growth and advancement that began with the inspiring and tragic tale of Heber Moshier.

A century of the Department of Physiology began with a war hero

e was young and ambitious, much like the budding med-

. Heber Havelock Moshier was named the first chair of the

ical school where he would play a major founding role.

Department of Physiology in 1914, a task the 24 year-old physician

approached with great avidity. Though nearly a century has passed

he left a legacy that would inspire others long after he left.

since Moshier last walked through the University of Alberta campus,

Before he agreed to lead the new department in Edmonton, Moshier graduated from the University of Toronto's medical program at the age of 20 and briefly practised medicine in Toronto and Calgary. He was officially recognized as chair of physiology from 1914 to 1918, but took military leave in 1916 after enlisting at the age of 27.

Esmond Sanders, James Young and Amy Hewko

With the help of a few part-time practising physicians called "demonstrators," the new chair taught pharmacy and physiology, which at that time included the disciplines now known as pharmacology and biochemistry. In his short time on campus, Moshier also recruited the Department of Physiology's most distinguished professor: James B. Collip, who would be instrumental in the discovery of insulin.

After joining the military, Moshier raised the 11th Canadian Field Ambulance Battalion, part of the Canadian Army Medical Corps. Thirty-two medical and pre-medical students were recruited from the four Western Canadian universities, including 16 students from the U of A-nearly the entire medical class of 1914. Major Moshier initially commanded the U of A contingent, until he was promoted to lieutenant-colonel and took command of the entire battalion in 1918. Moshier had his men keep a journal: "Diary of the Eleventh:

Being a Record of the XIth Canadian Field Ambulance (Western Universities). Feb. 1916-May 1919." It recounts the conditions Moshier and the medical students endured and the duties they undertook from the time the battalion was raised in Edmonton through the battles of Somme, Vimy Ridge and Passchendaele. The detailed, first-hand account of the activities of the field ambulance can be found in the Peel Collection of the University of Alberta Library and

The students who formed the 11th Canadian Field Ambulance Battalion acted mainly as stretcher bearers for the dead and wounded. They were the vital link between the regimental aid posts in the trenches, the field ambulances and the advanced dressing stations where Moshier worked. For this work, they received university course credit toward their medical degrees. At least two deaths were recorded among the students, though it is certain that many lives were saved.

Two months before the end of the war, the battalion suffered a heavy loss: Heber Moshier was killed in action Aug. 29, 1918, at the age of 29. At his burial in Villers Station Cemetery, France, it was said that, "It is given to a few men to leave so much achievement behind them at such an early age ... to lose Colonel Moshier was to suffer one of the heaviest losses in the unit's history.

Today, Heber Moshier's name lives on at the Faculty of Medicine & Dentistry. The Moshier Memorial Gold Medal in Medicine remains one of the most prestigious student honours awarded by the faculty.

The Department of Physiology's historical book, One Hundred Years of Physiology 1914–2014: The Department of Physiology at the University of Alberta, describes Moshier's service in the First World War and his career as head of physiology, the growth of the department he helped to found and the stories of his successors. The book is available for purchase at the U of A Bookstore in the Students' Union Building.

# FURCA is anything undergrads want it to be

Jamie Hanlon

₹he University of Alberta's Undergraduate Research Initiative is taking a "multi-pronged" approach to celebrating student research and productive endeavours on campus with a month-long program of events that reach across all disciplines

The institution's inaugural Festival of Undergraduate Research and Creative Activities, or FURCA, will see the unveiling of more than 30 activities and events taking place across several campuses in a couple of locations around Edmonton throughout November.



Connie Varnhagen, academic director of the research initiative, says that unlike its namesake, a twotined fork, FURCA can be "anything you want it to be."

"It's students and research, teaching and research, celebrating research and creative activities," she said. 'Not only are we celebrating interdisciplinary research, but this is bringing together people from all of our campuses to celebrate, promote and learn about under graduate research.

Though most of the events are focused on touting successful undergraduate research—with StorySlam, research crawls, a Nerd Nite and the third annual undergraduate research symposium—Varnhagen says the festival can also be an opportunity for academics to discover how to develop more opportunities.

■ We're about letting all students discover new knowledge for themselves in whatever way they want."

Connie Varnhagen

"We have faculty development workshops on how to bring undergraduate research into your classes—create an assignment or manage ethics if you are involving undergraduate students in research—and it's something that's difficult to do," said Varnhagen. "There are going to be great opportunities for students, faculty, grad students and staff."

Much like the contest that encourages students to submit their thought-provoking questions, she says, FURCA is a celebration of something distinct and inherent to the U of A: discovery, creativity and passion for researching the "big questions."

"There is no office like the Undergraduate Research Initiative in Canada and probably not anywhere in the world," said Varnhagen. "We're promoting all aspects of great research, from talks about great research in classes to learning the tools of the trade—whether it's parts of a poem or sonata, or learning to distil something—to having an inquiry-based learning environment and

new knowledge for themselves in whatever way they want." I

on the Web 'We're about letting all students discover www.folio.ualberta.ca

# U of A launches certificate program in computer game development

Geoff McMaster

7ith Canada ranking as the third-largest producer of video games in the world, the University of Alberta is stepping up efforts to prepare students for an industry worth about \$75 billion worldwide.

Launching this fall is the new certificate program in computer game development-training that will allow students to acquire deep knowledge in a single discipline while also taking courses in a variety of disciplines involved in the creation of games.

"We consciously went with a certificate, mostly because we did a lot of research on how universities could best meet the needs of gaming companies and still meet their own needs for promoting good students," says Sean Gouglas, director of interdisciplinary studies and co-director of the certificate program with computing science professor Michael Bowling.

That research showed that in addition to a solid grounding in their majors-such as computer programming or creative writing-students destined for the gaming industry need "an awful lot of experience working with people from other disciplines," says Gouglas.

'Making games is an inherently interdisciplinary project. Look at [Edmonton-based game producer] BioWare. It's a huge company, but



Sean Gouglas is co-director of the new computer game development certificate

only 20 per cent of its people are programmers. The rest are the soft and squishies—creative writers, fine artists, music composers and so on.'

To qualify for the certificate, students begin by taking a gateway course, Computers and Games 250. Teams of students from different disciplines—usually two from computing science, a creative writer, an artist and a musician—are thrown together and expected to build a game using BioWare's Neverwinter Nights engine

Demand is high for the course. Only 72 of about 240 applicants are accepted each year. Of those, 97 per cent opt to continue with the certificate, says Gouglas.

Students move on to select four courses among eight options. "Some are in computing science, some in interdisciplinary studies, some in arts,

some in education," says Gouglas, whose course on understanding video games as a cultural phenomenon is being developed into a massive online open course set to launch in the spring of 2014.

"The courses all focus on one aspect of the game-making projectmusic, creative writing, artificial intelligence, 3-D modelling and designing fun board games," says Gouglas.

BioWare is also an important teaching partner, he says. "Dozens of people from the company come to speak about the game design process and what it's like to work in the industry, or to serve as judges."

To finish off the program, students take a capstone course, which again requires interdisciplinary teams to build games. This time they use any engine they choose

but with more knowledge and experience at their disposal. Upon graduation, students will have a portfolio they can show game companies along with a degree in their major discipline.

Many have already been shadowing the certificate program over the past few years, says Gouglas, taking gaming courses already on offer, and will have everything they need to complete the certificate by spring convocation.

'We each bring something unique from our disciplines, and it's great to see how we collaborate," says senior history student Maren Wilson, "I also like how in each class I've taken, there has been a content creation component, so I feel as if I now have concrete items to put in my game development portfolio.

"This certificate program has helped to show me that I have a knack for producing and balancing interdisciplinary teams, and I'd love to put those skills to use in the future.

The program will produce 48 graduates each year. And although Gouglas is confident they'll be well prepared to work in the industry, grooming them to slide into large companies isn't as important as fostering the innovation that comes from independent thinking, he says.

Where you see the really interesting developments are in independent games. It's where we're going to see the next small or medium enterprise become the next BioWare. We love making people BioWare finds attractive, but we also like producing students who are equipped to go start their own game company." A

# Not bearing the brunt of changing climate, forests

lobal warming and forest disturbances may have a silver lining for Alberta's small population of grizzly bears.

In a 10-year study that monitored 112 bears in Alberta's Rocky Mountain region, University of Alberta biologist Scott Nielsen and his colleagues found that warmer temperatures and easier access to food associated with forest disturbances helped the grizzlies to build more body fat, known to increase the chances of successful reproduction for mothers.

The resulting "silver spoon effect" shows that bears born into these favourable conditions have a head start in life, said Nielsen, an assistant professor in the Department of Renewable Resources.

The findings, published in BMC Ecology, may help influence forest harvest designs to enhance habitat for the Alberta grizzly, which is classed by the Alberta government as a threatened species. There are only about 750 of the bears in the province, half of them adults.

"Understanding variations in body size helps us understand what limits grizzly populations," Nielsen said. "We get clues about the environments that most suit grizzlies by examining basic health measures such as body size. A simple rule is, the fatter the bear, the better. Certain environments promote fatter bears.

"Those who are born into rich environments do well. Our research shows that not only does it matter where the bear lives, but it also matters when it was born,"

In years when warmer temperatures and less late-winter snow brought on earlier spring conditions, adult bears were larger. Smaller bears were found in colder and less productive environments, or in abnormally cool years.

We hypothesize that warmer temperatures in this ecosystem, especially during late winter and spring, may not be such a bad thing for grizzlies," Nielsen said, noting



Grizzly bears in Alberta may be gaining time to fatten up before hibernating because of earlier spring temperatures and easier access to food.

that the range for the bears once extended as far south as Mexico and persists today even in the deserts of Mongolia. "That suggests the species won't likely be limited by rising temperatures, which would lengthen the growing season and the time needed to fatten prior to hibernation."

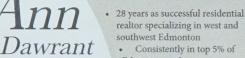
As well, bears that used disturbed forest habitats containing a wide variety of stand ages were healthier, Nielsen

"The diversity of stand ages in the landscape has a positive influence on body condition because bears are better able to access a wide range of food sources like roots, green plants, berries, insects and moose, which all have different responses to forest disturbances. The best way to maintain that diversity in food resources is to maintain a diversity of stand ages, from recently disturbed forests to old growth."

But although Alberta grizzlies seem to fall on the winning side of climate change in this case, survival rates need to improve, which requires "controlling and decommissioning roads in core grizzly habitat," Nielsen added.

The research was funded by Alberta Innovates Bio Solutions, the Natural Sciences and Engineering Research Council of Canada, the Canada Foundation for Innovation and the Foothills Research Institute.

# RE/MAX Real Estate Centre





Consistently in top 5% of Edmonton realtors

- Member of prestigious RE/MAX
- Platinum club · Born and raised in Buenos
- Aires and has lived in Edmonton
- Bilingual in English and Spanish

"Call me to experience the dedicated, knowledgable, and caring service that I provide to all my clients."

SUSTAINABILITY CHAMPIONS a.k.a. ecoreps NEEDED





Make your workspace more sustainable.

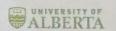
Come (with a bagged lunch) to find out how.

**INFORMATION SESSIONS:** 

- November 27, 2013, 12:00 to 1:00 pm
- December 5, 2013, 4:00 to 5:00 pm

Visit sustainability valberta.ca/ecoREPs to learn more or to RSVP.





# Math mentor values U of A's focus on teaching Bears hockey goes global

s a master's student at the University of Sarajevo in the 1990s, Enver Osmanagic remembers reading papers written by algebra professor Hans Brungs and a handful of others who worked in the complex field of valuation theory half a world away at the University of Alberta.

To Osmanagic, this small cluster of minds working in the area of mathematics was the hub of the kind of math he was fast becoming passionate about. "When I came to Canada, I contacted them and Hans Brungs became my PhD supervisor."

Osmanagic brought a strong math mind to Edmonton, but what Brungs and the rest of the math department didn't know they were getting was a mathematician who had a certain flair for teaching.

**1** The U of A has been very patient in providing a good teaching environment and it shows-there are many very good teachers here."

Enver Osmanagic

"In high school I realized that I understood some mathematic concepts very quickly," said Osmanagic, who received the 2013 William Hardy Alexander Award for Excellence in Undergraduate Teaching. "I remember a math teacher asked me to help somebody, and I realized I could do that as well, so when I graduated high school, I chose mathematics."

Osmanagic's command in the classroom became clear to all early on when he was awarded a Graduate Student Teaching Award in 2000. These awards are given to grad students who demonstrate superior subject knowledge and work commitment, and are respected by their students.



Enver Osmanagio

"The philosophy for me to teach successfully means to create a positive learning environment and create enthusiasm amongst the students that breaks a preconception that mathematics is hard and boring.

He says the trick to bringing math to life is to instil self-confidence. He does this through constant review and an ability to relate math concepts to everyday

"It's good for the students to see how things they learn in the classroom can solve very practical problems," said Osmanagic. "I am always trying to connect those examples from calculus or algebra to real lifethen they really see how mathematics can be powerful."

Osmanagic says his pride in his teaching comes from that moment he sees a student grasp a difficult concept and the comfort he feels knowing the value U of A administration places on teaching.

"Although the U of A is very famous in many disciplines for the research happening here, the university's efforts to improve teaching are very important," said Osmanagic. "You can feel it in many ways; at the department we pay attention to the well-being of students.

The U of A has been very patient in providing a good teaching environment and it shows-there are many very good teachers here."

t wasn't playoff hockey, but there was still a special buzz in Clare Drake Arena when some 600 University of Alberta international students wore their pride on their sleeves—and faces and chests—and cheered the onice heroics of the Golden Bears.

The final score—the Golden Bears defeated the UBC Thunderbirds 5–3—was a bonus, but the main goal of the Oct. 25 international hockey game was to welcome international students to campus, connect them with local alumni and community leaders and instil a sense of pride in the U of A, said Sean Price, associate vice-president of Alumni Relations, which organized the event with University of Alberta International and Athletics.

"Many international students, especially those coming here for the first time, don't know Canada or our culture that well. Hockey is near and dear to

These well-dressed Golden Bears hockey fans were among more than 600 international students at Clare Drake Arena Oct. 25 to get a taste of Canada's game and witness a

our hearts, and this was a chance to show students what it's all about," Price said.

In addition to learning the ins and outs of the game, students got a chance to make signs and noisemakers, and wear their U of A pride. But they also had an opportunity to get to know local alumni. International student specialist Nora Lambrecht said international

students are a big part of the campus community, and UAI is always looking for ways to help them get more involved.

"Recreation is a big part of that," she said, "and so is meeting previous grads, learning where they've come from and what they have accomplished."

Price added the Alumni Association recognizes students are not just future alumni, they're "part of the alumni family the minute they step

"That's why it's important for us to support what's important for students

#### LOCATION! LOCATION! LOCATION!



# Luxury Condominiums in Windsor Park

11710 - 87 Avenue, Edmonton, AB

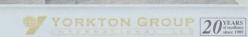
 Adjacent to the University of Alberta and close to many amenities including Hawrelak Park, Jubilee Auditorium and the Mayfair Golf & Country Club

Heated underground parking

• Up to 1479 sq. ft. double master ensuite units available

2 Bedroom from \$469,900

Over 33% sold in 8 weeks



www.bentleycondos.ca Off-site sales centre: 6930 - 109 St., Edmonton Ph: 780-907-5263 Pre-construction pricing in effect; call now to find out about our limited time promotion

# Researchers put pedal to the metal to improve diesel engines

Jamie Hanlon

A recent project by University of Alberta researcher Robert Hayes yielded more than just a way to reduce the use of precious metals in controlling emissions from

gasoline-powered vehicles. His work also boosted the engine's fuel efficiency.

Now, Hayes and fellow U of A researcher Bob Koch have been awarded a grant from the Natural Sciences and Engineering Research Council of Canada, under the

Hip new exhibit comes to Bio Sci

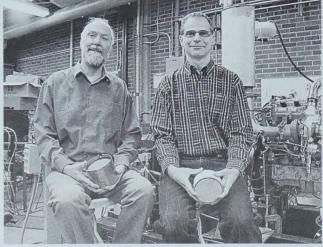
Automotive Partnerships Canada initiative, to try duplicating the results for catalytic systems in diesel engines.

Their award was one of 10 announced this morning by the Honourable Greg Rickford, minister of state for science and technology. The \$1.2-million award, which is shared between the federal government and industry, will fund the three-year project.

"The potential for reducing precious metals is even better in diesel engines because you need much more active catalysts," said Hayes. "And if you can reduce the precious metals by 10 per cent, the cost saving is much greater."

Though the work to reduce the use of metals such as platinum, rhodium and palladium is important, Hayes says, the automotive industry is also looking to meet standards imposed by impending changes to the U.S. Corporate Average Fuel Economy regulations that are set to change in 2016. He says there are some significant differences between emission controls for gasoline and diesel engines. Yet, part of the goal will still be to improve fuel economy, thus reducing emissions.

"In a dieseLor any lean-burn engine system, there's a lot of oxygen in the exhaust, so you need separate catalysts to do all the different reactions. It's a very complicated interplay," said Hayes.



Robert Hayes (left) and Bob Koch received an NSERC grant to find ways of reducing precious metals in emission-control systems by 2016.

"We're going to study that system to see the best way to put in the new modifications."

Hayes hopes to have some initial test results to demonstrate to their industry partners, Vida Holdings, within the first year. Theoretically, he says, their work—pending some rigorous industry testing and government approval—may make its way into production within three years.

Hayes notes that their entire process will be based on fine-tuning their results for an optimal design, but getting a preliminary finding that improves on current designs helps the industry in its race to meet the 2016 timeline.

"There's a big push right now because they want to meet those 2016 goals, which means they need the technology now," he said. "We designed the timelines in that manner. We have some [industrial lab] testing right in the first year, so we'll do some preliminary work and we'll say, 'This is what we think is the best starting point; let's test it."

"If the system works, there will be potential for large manufacturers to increase their fuel efficiency and reduce their emissions," said Koch. "This is a diesel project but there are a lot of diesel engines in North America. People who run fleets of trucks will really care about the impact this could have."

and to black your many paint

# Weighing the Impact of

Collaborative Research

This new exhibit case in the centre wing of Bio Sci features the pelvis of a



A new baby is a bundle of joy, but for many new moms, losing those extra pounds after baby is born can be a bundle of frustrations. More than half of Canadian women gain more weight during their pregnancies than is recommended, leading to short and long term health issues for them and their babies.

Rhonda Bell, PhD; Linda McCargar, PhD, RD; Paula Robson, PhD; and Maria Mayan, PhD, want to help women follow a healthy diet during pregnancy, and achieve healthy weights during and after pregnancy. The research team will work directly with health providers and women to help move their findings into everyday use.

Alberta Innovates – Health Solutions' (AIHS) 2013 Collaborative Research and Innovation Opportunities (CRIO) Program supports six collaborative health research teams in Alberta. AIHS's funding initiatives tackle priority issues in the areas of health, wellness, and the health system so that all Albertans benefit from the resulting research and innovations.

Learn about how we are making a difference: aihealthsolutions.ca

The successful recipients of the 2013 AIHS CRIO Program competition:

Drs. Rhonda Bell (UA), Linda McCargar (UA), Paula Robson (AHS), Maria Mayan, PhD (UA) Healthy maternal weight

**Drs. Carolyn A. Emery, Brent E. Hagel** (UC)
Youth sport injury prevention

**Dr. Karen J. Goodman** (UA) Community-driven H. pylori research Drs. Neil A. Hagen (UC), Konrad P. Fassbender (UA), Jessica E. Simon (AHS) Advance care (end of life) planning

Drs. Piyush Kumar (UA), John R. Mercer (UA), Alexander McEwan (UA), Hans-Sonke F. Jans (UA), Naresh Jha (UA), Michael Weinfeld (UA)
New anti-cancer drug

Drs. Richard A. Rachubinski (UA), Andrew J. Simmonds (UA), Nancy Braverman (McGU) Peroxisome disorders

UA = University of Alberta
UC = University of Calgary

AHS = Alberta Health Services
McGU = McGill University



命命命命命命

Leading U:

# Student's e-book highlights U of A leadership by example

ince coming to the University of Alberta in 2009, political science student Emerson Csorba served on the Students'



**Emerson Csorba** 

Union Council, co-ordinated the "Stand Up for Edmonton: The University of Alberta's Place in Edmonton" event, was named a 3M National Student Fellow, spoke at the United Nations as part of

the International Youth Leadership Assembly and co-founded The Wanderer Online, one of Edmonton's most-read daily online magazines.

As if that weren't enough, he can now add book editor to his list of achievements. Csorba led and co-edited Leading U, an e-book

in which 36 leaders with U of A connections share their on-campus experiences and

Although the book reflects a broad snapshot of stories across all faculties, it has a strong foundation in the Faculty of Arts: Csorba's co-editors—Tori McNish, Kevin Pinkoski and Chelsey Van Weerden—are arts alumni, and contributors include other prominent arts alumni such as Brad Ferguson, Amy Shostak and Paula Simons.

"Several years ago, I participated in orientation as a senior volunteer, and remembered thinking to myself that the university needs a way to extend orientation past the first week of classes," says Csorba. "Leading U is meant to serve as this resource, hopefully providing incoming students with something they can use to become engaged in university life from the first moment they set foot on campus.'

To find contributors, Csorba relied on personal connections he made during his time on campus. Hallie Brodie (who runs the

YouAlberta student life blog for the U of A) provided the cover design, and Csorba credits Sean Price and the Alumni Association for being extremely helpful in answering all of his questions.

Despite the varied experiences captured in the book, there's a common thread that runs through the stories: U of A students transform as people during their university experience.

'This sounds obvious, but I think it's worth saying, because our society now questions the value of a university degree and focuses quite heavily on the acquisition of job skills. Developing particular kinds of knowledge and skills is important, but there's a human dimension to university life that I view as exponentially more important," says Csorba.

"In every essay, the contributor remarks that the University of Alberta provided experiences not previously imagined, whether it's travelling to Japan, meeting one's lifelong partner, founding a business or discovering oneself through readings of Aristotle's Nicomachean

ences fundamentally shape a person, and they pave the road to a fulfilling life.

Csorba, who is pursuing double honours in political

politiques, says producing the book helped him reflect on his own experiences over the past four years.

"My guess is that people's interpretations of the stories will vary based on their program and year of study. But that's part of the beauty in this book: it's something that can be re-read at the beginning of each new year," he suggests.

Csorba hopes to expand the book to include more stories from new and older alumni. "Because of the quality of people at the University of Alberta, we can surprise ourselves with the things that can be accomplished in relatively short periods of time." In

# Agreements to expand student opportunities, deepen U of A partnership with China

greements signed Oct. 24 by the University of Alberta and a leading Chinese university founded by Dr. Sun Yat-sen—the revolutionary founder of modern China-are broadening opportunities for student and faculty exchanges and

Attended by Governor General of Canada David Johnston, a signing ceremony held at Sun Yat-sen University in Guangzhou, China, formalized three agreements between the two institutions that pave the way for broader co-operation and build on existing partnerships such as the SYSU-Alberta Joint Lab for Biodiversity Conservation.

The memorandums of understanding include an institutionwide agreement to foster academic exchanges and co-operation among faculty and students, a

university-wide student exchange agreement, and a funding agreement to attract top Chinese PhD students to the U of A through the China Scholarship Council program.

Founded in 1924 by its name sake, Sun Yat-sen University is a vibrant, multidisciplinary institution and a valued U of A partner, said Carl Amrhein, provost and vicepresident academic, who signed the agreements on the U of A's behalf.

These agreements celebrate a commitment for co-operation and sharing of knowledge between the University of Alberta and Sun Yat-sen University, which ultimately benefits Albertans and Canadians through the synergies created by academic exchanges and collaborative research," Amrhein said. "Innovation is the result."

A prime example of such success is the joint biodiversity lab established at Sun Yat-sen University through a 2011 agreement with the



Provost Carl Amrhein and Sun Yat-sen University vice-president Xiping Zhu sign the

U of A. In recognition of the SYSU-Alberta lab's work, a nameplate for the facility was unveiled Oct. 24 by the governor general, Sun Yat-sen University president Ningsheng Xu and Amrhein.

Established through the efforts of U of A Faculty of Agricultural, Life and Environmental Sciences professor John Spence and led by ALES professor and Canada Research Chair Fangliang He, the lab has drawn

collaborative researchers from around the globe including the United States, Australia and Europe, as well as Canada and China. Graduate students and post-doctoral fellows from both countries also benefit from working together in the lab, building a legacy of international co-operation for vital future research, He said.

The loss of biodiversity is a global issue and we need multinational collaboration to tackle it.'

Cutting-edge research produced by the lab teams on species extinction and the importance of ecology and biodiversity conservation has appeared in high-impact publications such as Science, Nature and The Economist. As well, the differing climates offered by Alberta and southern China have allowed for hypothesis testing that could help address Alberta's ecological challenges.

The trio of agreements and the continuing work of the lab all strengthen the U of A's profile in the populous Guangdong Province where Sun Yat-sen University is based, and create new relationships with southern China, said Cen Huang, executive director of international relations and recruitment for University of Alberta International.

"There is tremendous potential to attract talented undergraduate and graduate students and researchers to the University of Alberta from southern China," said Huang.

# Overcoming weight bias in health care

₹ ive days after undergoing gastric bypass surgery to reduce the size of her stomach and lose weight, Adrianna O'Regan knew something was wrong. She became violently ill and could not even keep down water.

But when she went to a local hospital, she was refused admission by a triage nurse who said her illness was her body's way of telling her she needed to lose weight. Undeterred, O'Regan saw her surgeon the next day and learned her bowel had blown up like a balloon—a complication that, if left untreated, would have been fatal.

"I never expected that kind of discrimination from a health professional, especially when I just did something to help me lose weight," O'Regan remembers of her run-in with the triage nurse and experience with weight bias. It's a term that refers to negative attitudes and stigmatization of people with obesity.

Mary Forhan, an assistant professor in the Faculty of Rehabilitation Medicine, says weight bias isn't confined to Hollywood or popular culture but happens everywhere—in cluding the health-care sector, where consequences can be life

Patients or people living with obesity feel to some degree disadvantaged by feeling that their health-care providers don't understand their condition or attribute all of their health problems to their weight, which may not be the case," says Forhan, an occupational therapist whose research focuses on obesity and rehabilitation. "As a result, many patients living with obesity tend to avoid seeking preventive health care because of this experience of feeling blamed or shamed."

After hearing numerous such concerns from patients through her research, Forhan, in collaboration with Ximena Ramos-Salas, a PhD student in the School of Public Health, decided to examine the issue in depth and recently published a review of weight bias in health care.

Research shows that although primary-care physicians understand the risks of carrying excess weight, they often lack the training to properly treat obesity. The result is that they oversimplify the disease, fail to send patients for weight-loss counselling and often resort to stereotypes that patients are lazy or unmotivated.

Forhan said treating obesity is far more complicated than "exercise more and eat less." A wide range of factors can cause weight gain, including genetic predisposition, injuries preventing mobility, side-effects from treating a mental health condition, a physiological disorder that affects a patient's metabolism, and social circumstances limiting access to healthy foods or recreation.

When the Canadian Medical Association published guidelines on treating obesity in children and adults in 2007, obesity researchers like Forhan were excited, but that soon faded Guidelines, she says, are only effective if the information makes it to the front lines, which has been a slow process

Forhan aims to make progress on the issue at the U of A, training students and clinicians across several health disciplines about safely and respectfully caring for patients with obes ity. She also hopes to make gains through research in her role academic co-lead of the specialized-care bariatric suite in the Health Sciences Education and Research Commons on campus—the only facility of its kind in Canada—working



Mary Forhan shows bariatric patient Adrianna O'Regan how to put on socks using a special tool in the specialized-care suite

alongside Arya Sharma, chair of obesity research and management in the Faculty of Medicine & Dentistry.

Forhan is also well connected to the Canadian Obesity Network, through which she first built relationships at the Faculty of Rehabilitation Medicine that contributed to her decision to leave her home in Ontario and move to Edmonton this past summer.

'To be able to do the research I wanted to do that I felt was needed, I needed to come to the U of A and an environment that would give me the opportunities to do that," she says. "There are great senior researchers who have developed some fantastic research, so to have mentors and that support system in place is really invaluable."

# news [shorts]

folio presents a sample of some of the stories that recently appeared on the

# Budget planning table released

On Nov. 1, university administration released a detailed budget planning table for 2013-2014 that provides a breakdown of data and information on this year's budget at a faculty and support unit level.

The table shows where each faculty and support unit's base budget began at the beginning of the 2013-2014 fiscal year, the cuts that each faculty and support unit was levied in 2013-2014, other positive and negative changes made to their budgets in 2013, and the total impact of those changes on their 2013-2014 base budgets.

All faculty, staff and students with a CCID and password have access to the document online. Please visit Change@UAlberta for a link to the Google site.

# Pachter's satirical, celebratory art arrives

Works by a celebrated contemporary artist who has been called Canada's equivalent to Lichtenstein, Warhol or Hockney have been do nated to the U of A and are on display in a new exhibit.

Pop Goes Canadiana: Iconic Art by Charles Pachter features 12 works including paintings, prints, a sculpture and a portfolio.

An officer of the Order of Canada, Pachter channels everyday Canadian icons-moose, hockey players, Mounties and the Queen-into stylized pop images. His mother was born in Edmonton, and he identifies a trip across the Prairies as pivotal in his efforts to define salient qualities of the Canadian identity.

The works included in Pachter's important and generous gift to the U of A's art collection reflect his early experimentation with media and technique, the realization of a satirical and humorous artistic voice in later works, and his collaboration and lifelong friendship with Margaret Atwood. While the exuberance, humour and grand scale of Pachter's art has defied the stereotypes of humble and polite Canadians, the images he has crafted promote a modern Canadian mythology for all.

Pachter himself will be in town Nov. 14 to coincide with the exhibition and to deliver a public lecture, "How to Survive and Thrive as a Contemporary Canadian Artist.'

Pop Goes Canadiana runs until Nov. 30 in the Enterprise Square Galleries Thursdays and Fridays noon–6 p.m., and Saturdays noon–4 p.m. Admission is by donation.

# Austen aficionados get rare glimpse of first editions

On Oct. 25, 15 members of the Edmonton chapter of the Jane Austen Society of North America got a rare treat when they visited the University of Alberta's Bruce Peel Special Collections—a chance to view a complete set of first editions of Austen's novels.

"No one knows exactly how the University of Alberta came to possess these treasures, but we are glad that someone had the perspicacity, and the means, to purchase them," said English professor Nora Stovel, whose late husband and fellow professor Bruce Stovel discovered a first edition of Pride and Prejudice on the circulating shelves of the U of A library, and whose literary detective work with the director of special collections helped to bring some of the other first editions to light.

# Cargill pledges \$1 million to Augustana arts centre

On Oct. 24, Allen Berger, dean of Augustana, announced that Cargill has pledged to donate \$1 million in support of the new Performing Arts Centre on the Camrose campus.

The donation came with a commitment from the agriculture giant to partner with Augustana in areas of wetlands and watershed development, sustainable rural communities, and health and wellness.

"Not only is this an inspiring gift for the performing arts here in Camrose," said Berger, "but this is also the start of an ongoing relationship with Cargill here on campus.'

## MLAs urged to ban flavoured tobacco

Medical students from Edmonton and Calgary met with members of the Legislative Assembly Nov. 4 to advocate for a ban on flavoured tobacco products.

Each year, medical students in Alberta head to the legislature to lobby the provincial government about an important health-care topic. This annual initiative is known as Political Action Day.

Medical students hope banning flavoured tobacco products, such as menthol cigarettes, flavoured cigars and cigarillos, and water pipe tobacco or chewing tobacco, will deter youth from smoking.

A recent survey revealed that 56 per cent of youth tobacco users in Alberta are using flavoured tobacco products.

# North Campus development plan open house

The U of A is holding a public open house Nov. 19 to show the proposed amendment to the North Campus Long Range Development Plan. Information presented will show progress to date on the university's land use plans for North Campus.

The open house will be held at Telus Centre from 5:30-8:30 p.m. Information presented will be online at www.communityrelations ualberta.ca the following day, and comments on the amendment will be accepted until Dec. 10.

# Friend of drama department will be missed

The University of Alberta is mourning the passing of Clara Hare, a great acting alumna and steadfast friend of the drama department. She was 81. Clara Hare, nee Anglevelt, born in Provost in 1932, attended the U of A from 1951-55, in which



time she was elected as a vice-president of the Students' Union Association, graduated with a bachelor of arts degree, met her husband Carl and honed her skills as an actress.

"Clara was always very generous, to students and fellow professional actors," said Jan

Selman, drama professor and longtime friend of Clara's. "As an actress she created some outstanding roles, marked by honesty and intensity."

One of Clara's earliest roles came opposite Thomas Peacocke, drama professor emeritus and a classmate of Clara's, who remembers performing alongside the fledgling actress in John Millington Synge's Playboy of the Western World in 1955.

"That was a career-changing experience for me and I think it may have been for Clara, too.

Clara married Carl Hare that same year and the two of them travelled to England for further their studies. Their careers took them to the University of Victoria in 1956 when Carl was offered a faculty position. There they would work and raise a family before Carl was brought back to the U of A to lead the Department of

Back in Alberta, in addition to having provided extraordinary support to Carl, Clara was an active participant in the U of A's Alumni Association, Studio Theatre and various theatres in Edmonton, work that carried on well into retirement. She worked tirelessly in faculties' creative research projects, as both a creator and a performer. She also worked with many U of A graduates and alumni, as a performer, director and arts organizer.

"She was filled with boundless energy, extremely generous in passing on her information and skills, whether the recipients were amateur, academic or professional," said Peacocke. "She was always interested in the work of others and generous in her love and friendship."

Selman also recalls her friend's generosity as well as her dedication to her craft, no matter what her role.

"As a peer in the professional theatre community, she was supportive, engaged, caring and insightful about the work," said Selman. "She kept the highest of standards—her commitment to excellent work was admirable, as was her integrity.

"It is hard to imagine that she is no longer with us."  $oldsymbol{\mathbb{R}}$ 

# Lynn Coady wins Giller Prize

Folio Staff

ynn Coady, a former writer-in-residence at the U of A and co-editor of a literary magazine affiliated with the Faculty of Arts, won the 12013 Scotiabank Giller

Prize for her short-story collection,

Coady was writer-in-residence in the U of A's Department of English and Film Studies in 2008-09. She is senior editor of Eighteen Bridges, a literary magazine published out of the U of A's Canadian Literature Centre.

The Giller Prize is awarded annually to the author of the best

Canadian novel or short-story collection published in English. It includes a \$50,000 award for the winner and \$5,000 for each of the finalists.

Coady's book is also up for the \$25,000 Rogers Writers' Trust Fiction Prize, to be awarded Nov. 20 in Toronto.



**Feng Qiu,** professor in the Department of Resource Economics and Environmental Sociology, was awarded the 2013 German Society of Economic and Social Sciences Best Paper Award for an article entitled Export Restrictions and Multiple Spatial Price Equilibria: Export Quotas for Wheat

Laurent Cammarata, professor at Campus Saint-Jean, has been awarded the 2013 Paul Pimsleur Award for Research in Foreign Language Education for his article Balancing Content and Language in Instruction: The Experience of Immersion Teachers, published in Modern Languages Journal.

# classified ads

VICTORIA. 4 bedroom house in secluded location. Expansive ocean views. Large mature garden. 2 levels, 3,400 sq. ft. Phone 250-658-4242 or email cjanssen@telus.net for photos.

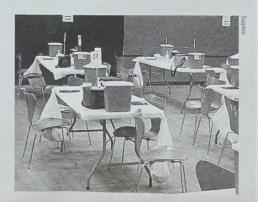
Lynn Coady won the 2013 Scotiabank Giller Prize for *Hellgoing*.

### **GOODS FOR SALE**

QUALITY ACADEMIC BOOKS BOUGHT AND SOLD. Please visit The Edmonton Book Store, 10533 82 Avenue, 780-433-1781, and HUB Books in HUB Mall on campus. www.edmontonbookstore.com.

# Are You a

Congratulations to G.H. Sperber who won a Butterdome butter dish as part of Folio's Oct. 25 "Are You a Winner?" contest. Burke identified the picture as depicting the "Free Bike Checks" held during Sustainability Awareness Week at the Myer Horowitz Theatre loading dock Oct. 22. Up for grabs this week is another Butterdome butter dish. To win it, simply identify where the subjects pictured are located and email your answer to folio@ualberta.ca by noon on Monday, Nov. 18, and you will be entered into the draw.



# Inuit art exhibit shows off collection acquired over five decades

Genff McMaste

here are few cultural objects as distinctly Canadian as a work of Inuit art, recognized around the world for its character and beauty.

Now, for the first time, the University of Alberta is exhibiting its extensive collection of Inuit art amassed over five decades in a show called Sanaunguabik: Traditions and Transformations in Inuit Art.

On display at Enterprise Square Galleries until Dec. 21, the exhibit contains almost 100 works by 65 artists—mostly prints but also some textiles, sculpture and film. It is meant to show the development of Inuit art in six regions of the Arctic over the past 65 years, says assistant curator Matthew Hills.

"The great thing about having this space in Enterprise Square is we can finally show it off," says Hills. "We've collected primarily Inuit prints, one of the most prevalent forms of printmaking in the country. In Edmonton there is a real passion for Inuit art, there are organizations that are committed to it, and Edmonton has the third-largest Inuit population outside of the Arctic."

Inuit printmaking was born as Northern communities underwent radical transformations in the 1950s, turning away from a migratory life of hunting and trade to one of settlements grounded in a monetary economy. Partly to stimulate economic growth, northern service officer James Houston opened a one-room crafts shop in Cape Dorset that would become the first printmaking co-op in the North.

That studio, in what is now called Kinngait, is considered the centre of the Inuit printmaking movement, producing a series of exceptional artists over the years and inspiring more across the Arctic, many of them women.

"It's a very patriarchal culture, but the studio movement provided opportunities for women to find expression and be financially independent to a degree," says Hills. "And you see that in contemporary art, young women reflecting more deliberately on femininity and the role of women artists."

The most iconic artist of this female cohort is Kenojuak Ashevak, the matriarch of Kinngait printmaking who became famous after creating *The Enchanted Owl*, which appeared on a 1970 Canadian postage stamp.



Sanaunguabik: Traditions and Transformations in Inuit
Art is on display at Enterprise Square until Dec. 21.

Another Kinngait artist, Pitseolak Ashoona, produced more than 7,000 drawings in 25 years, but is also famous for producing children and grandchildren who went on to international stardom as artists in their own right. Because of her prolific output, Ashoona is the most represented artist in the U of A's collection with some 65 works.

Technological determinism plays a big part in the birth of Inuit printmaking, says Hills. Paints, for example, freeze and can't be easily sourced, whereas inks are much easier to acquire.

"And one thing about the studio is that it's a centralized location that's heated—it's a

place for the community to come together," he says. "It's one resource that can be cared fo by the group."

The Sanaunguabik exhibition highlights the work of artists in six co-op studios in the Northwest Territories, Nunavut and Nunavik. Some of the more prominent include Myra Kukiiyaut, Jessie Oonark, Kananginak Pootoogook and Marion Tuu'luq.

"I want people to be aware of the diversity of Inuit art, and that it's a really active field for printmaking," says Hills. "But I also want people to come away with an impression of the resilience in Inuit culture.

He added, "The '50s were a really rough time, with famine and economic hardship, during which large numbers of people were wiped out.

"So to persevere and create beautiful art, full of joy and humour, is amazing. It's from people who traditionally didn't have a voice, finding a voice."

As part of the programming for the exhibit, U of A Museums will screen *Kinngait*: *Right Light Into the World*, a documentary film on the history of Inuit art, at 7 p.m.

Nov. 6 at the Metro Cinema.

# talks & events

Talks & Events listings do not accept submissions via fax, mail, email or phone. Please enter events you'd like to appear in folio and at www.news.ualberta.ca/events.

A more comprehensive list of events is available online at www.events.ualberta.ca. Deadline: noon one week prior to publication. Entries will be edited for style and length

#### UNTIL FEB. 7

Culinaria. The Bruce Peel Special Collections Library is displaying two beautiful Culinaria exhibitions: one physical (drawing from the Linda Miron Distad Culinaria Collection) and one online (featuring works from the Prairie provinces). They will be of interest to food lovers and book lovers alike.

#### UNTIL NOV. 30

Print Resonance. This exhibition was organized and circulated by the Musashino Art University Museum & Library in Japan and Professor Ryuta Endo, and includes participation from the Royal Academy of Fine Arts Antwerp in Belgium, Silpakorn University in Thailand and University of Tennessee, Knoxville. FAB Gallery.

**Creature of Climax: Agata Derda.** This exhibition is the final visual presentation for the degree of Master of Fine Arts in Printmaking. FAB Gallery.

#### NOV. 11

Enterprise Quartet Concert: And Lest We Forget Memorial Concert. 7:30–9 p.m. Convocation Hall. Free admission.

#### NOV. 12

U of A GIS Day 2013. Held as Part of the National Geographic Society's Geography Awareness Week held in November, U of A GIS Day is the perfect occasion for users of geographic information systems to showcase their research and education applications and explore potential collaborations. 1–5 p.m. 1-160 PMCCIS. Register at www.ualberta.ca/~gis.

#### NOV. 13

Educated Luncheon – Feed Your Body, Feed Your Mind. U of A researcher Catherine La Farge garnered rock-star status in the botany world this summer when her team discovered that seemingly dead moss can regrow after hundreds of years under Arctic ice. Come hear her speak about the implications of this startling discovery. \$10 includes hot lunch. Lunch hour at Enterprise Square.

#### NOV. 14

The Holodomor (Famine in Ukraine), 1932–33: The View From the Polish Foreign Office. Robert Kusnierz, professor at the Institute of History and Political Science at Poland's Pomeranian University, will be on hand to talk about the inaction of the Polish Foreign Office relating to reliable information on the terrible condition of the peasantry in Soviet Ukraine during the Holodomor of 1932-1933. 3 p.m. 227 Athabasca Hall.

International Update – U of A's Position in a Changing International Education Landscape. A seminar by Daniel Guhr, managing director of the Illuminate Consulting Group, a well-known higher education consulting firm. Please register by Nov.13 at bit. ly/1cqfLFl.

2-4 p.m. 236/238 Telus Centre.

Killam Prize Winner Lecture Series – Past Climate Tests of Future Climate Predictions: Testing Climate Model Veracity. Richard Peltier, University of Toronto physics professor and 2013 Canada Council Killam Prize Winner in Natural Sciences, will show how his mathematical concepts depict how our climate has evolved over the past 750 million years, and project what is likely to happen in the future. As he addressed climate model veracity, his presentation will include examples of past events along the "Alberta corridor." 4 p.m. 150 Telus Centre.

Global Health Film Series: Heart of Sky, Heart of Earth. The ancient Maya believed this present world would end and a new cycle would arise after 5,125 years. How does the story end? Heart of Sky, Heart of Earth follows six young Maya in Guatemala and Chiapas through their daily ceremonial life, revealing their determination to resist the destruction of their culture and environment. 5 –7 p.m. 2-420 ECHA.

## NOV. 15

International Week: Call for Proposals Deadline. Details can be found at www.globaled.ualberta.ca/iweek.

#### NOV. 16

Futurescape City Tour exhibition. Join researchers as part of an interactive tour examining the relationship between novel technologies and the future of our city-region. Telus World of Science. For more details go to www.crsc.ualberta. ca/Research/Nano-community/ and click on Futurescape city tours.

Healthy Campus Symposium. This initiative of University Wellness Services'

Health & Wellness Team, will showcase healthy campus project ideas from participants of the "Heroes for Health Challenge." Registration deadline is Nov. 12. 10 a.m.—2:15 p.m.

### NOV. 17-19

Enterprise Quartet Concert: Prussian Quartets III. Mozart's last quartets, and three more by J. Haydn—all nicknamed "Prussian." (Nov. 17) 1–2:30 p.m. Whitemud Crossing Library. (Nov. 18) Noon—1:30 p.m. Winspear. (Nov. 19) 7:30–9 p.m. City Hall. Free admission.

## NOV. 17

The Company of Heaven: Britten at 100. 8–10 p.m. Winspear Centre. Tickets at yeglive.ca/ualbertamusic.

#### NOV. 18

Undergraduate Research Across the Curriculum. Brad Wuetherick, director of the Centre for Learning and Teaching at Dalhousie University, and Connie Varnhagen, academic director of Undergraduate Research Initiative, will present a model for curriculum and work with faculty on curriculum (re) development to build in appropriate undergraduate research experiences across degree programs. 2–5 p.m. 217/219 Telus Centre.

Monday Noon Music – Piano Concert. Students of Janet Scott Hoyt. Noon– 1 p.m. Convocation Hall. Free admission.

#### NOV. 19-20

Convocation. Don Getty will receive an honorary doctor of laws degree Nov. 19 at 3 p.m. Sarah McLachlan will receive an honorary doctor of laws degree Nov. 20 at 10 a.m. Charles Hantho will receive an honorary doctor of laws degree Nov. 20 at 3 p.m.

#### NOV. 19

Creating Course-Based Undergraduate Research Projects and Assignments. In this workshop Brad Wuetherick, director of the Centre for Learning and Teaching at Dalhousie University, and Connie Varnhagen, academic director of the University Research Initiative, will help educators develop undergraduate research assignments and projects. 2–5 p.m. 217/219 Telus Centre.

#### NOV. 20

Regional Planning Speaker Series: What Is an Innovative City? Kevin Jones and

Rob Shields from City-Region Studies Centre will provide an introduction to thinking about cities as innovative spaces. Chris Lumb, CEO of TEC Edmonton, will address the importance of entrepreneurship as a means of fostering innovation. Details of the Blatchford City-Centre Airport Development will also be discussed. 5:30–7 p.m. Art Gallery of Alberta.

#### NOV. 21

**Symphonic Wind Ensemble**. 8–10 p.m. Convocation Hall. Admission by donation.

Celebration of Service. The annual Celebration of Service recognizes faculty and staff who have attained 25, 30, 35, 40 or 45 years of service within the 2013 calendar year. For more, contact Sarah Flower sarah flower@ualberta.ca. 3–6 p.m. Myer Horowitz Theatre.

Global Health Film Series: Water Wars: When Drought, Flood, and Greed Collide. This documentary uncovers critical water issues facing humanity. It takes the viewer from the floods and droughts in Bangladesh, to dam building in India, to water management in the Netherlands and the United States. 5–7 p.m. 2-420 ECHA.

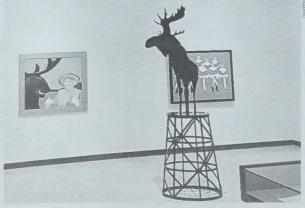
The Educated Entrepreneur. Thinking of starting a business? Ready to take your small business to the next level? A panel of U of A alumni entrepreneurs, advisors and community leaders will share their expert advice and experience. \$15.6–8:30 p.m. Lister Centre. For more, contact katy.yachimec@ualberta.ca.

#### NOV. 22

Festival of Ideas. Singer/songwriter Alanis Morissette and writer Margaret Atwood will share a lively discussion on "Life, Love and Art." The evening will be moderated by Jared Bland of The Globe and Mail and include a Q&A with the audience. 8 p.m. Winspear Centre.

Contempo. 7–10 p.m. Convocation Hall. Admission by donation.

3rd Annual Undergraduate Research Symposium. The marquee event of the November-long Festival of Undergraduate Research and Creative Activities, this symposium is an opportunity for students to share their research through posters, performances or other demonstrations. 11–2 p.m. CCIS.



The moose is on the loose

What do the prime minister's residence, the Canadian Embassy in Washington, D.C., and the University of Alberta have in common? All are home to the art of Charles Pachter, thanks to a generous gift by the artist to the U of A. An exhibition at the Enterprise Square Galleries until Nov. 30 is a chance to get a first-hand look at how Pachter's indelible pop images satirize and celebrate icons of Canadiana.



# A BRACING -5 C COULDN'T STOP

a determined group of divers from taking the plunge for charity in the University of Alberta's main quad the morning of Oct. 29. The eighth annual Chillin' for Charity, a campus event to raise money for the United Way, saw almost 100 participants doff their warm clothing and dive into the frigid waters.

The Chillin' for Charity drive, an event held at schools nationally as part of the Jeux de Commerce games, is expected to raise roughly \$10,000 for the campus campaign.

